

FGUS73 KDMX 270007

ESFDMX

IAC001-003-007-009-013-015-017-023-025-027-029-033-039-047-049-051-053-063-069-073-075-077-079-081-083-091-099-109-117-121-123-125-127-135-147-151-153-157-159-161-169-171-173-175-179-181-185-187-189-195-197-281800-

PROBABILISTIC HYDROLOGIC OUTLOOK
NATIONAL WEATHER SERVICE DES MOINES IA
605 PM CST WED JAN 26 2011

...SPRING FLOOD AND WATER RESOURCES OUTLOOK...

THIS FLOOD OUTLOOK IS FOR THE NWS DES MOINES SERVICE AREA. IT COVERS THE TIME PERIOD FOR FEBRUARY THROUGH APRIL 2011. IT INCLUDES THE FOLLOWING RIVERS AND THEIR TRIBUTARIES IN NORTH CENTRAL...CENTRAL AND SOUTH CENTRAL IOWA...

IOWA...CEDAR...SKUNK...DES MOINES...RACCOON...NISHNABOTNA...
102...THOMPSON AND CHARITON RIVERS

...FLOOD OUTLOOK HIGHLIGHTS...

* THE RISK OF FLOODING FROM LATE WINTER INTO SPRING IS NEAR TO ABOVE NORMAL. CURRENT INFORMATION SUGGESTS IT IS MOST ABOVE NORMAL ACROSS NORTHERN PORTIONS OF THE CEDAR...IOWA AND WINNEBAGO RIVER BASINS...AS WELL AS IN THE UPPER DES MOINES RIVER BASIN.

* THE TIME PERIOD WHEN FLOODING IS MOST LIKELY BEGINS BY MID MARCH...AND EXTENDS INTO APRIL. STREAM LEVELS TYPICALLY BEGIN INCREASING BY MID MARCH. A SIGNIFICANT...PROLONGED WARM-UP MAY RESULT IN EARLIER RISES ON THE STREAMS.

* BE ON THE LOOKOUT FOR ICE JAMS...ESPECIALLY IN THE LOCATIONS MOST PRONE TO THEM. THEY WILL BE MOST LIKELY BY MID MARCH. THE RISK OF ICE JAMS IS NEAR NORMAL. A QUICK WARM-UP MAY RESULT IN EARLIER ICE JAMS.

* ABNORMAL TEMPERATURE AND PRECIPITATION BETWEEN NOW AND THE SPRING THAW MAY SIGNIFICANTLY AFFECT THE RISK OF FLOODING. THIS OUTLOOK ASSUMES NEAR NORMAL TEMPERATURES AND PRECIPITATION THROUGH THE SPRING THAW. ABOVE NORMAL PRECIPITATION WOULD TEND TO INCREASE THE RISK OF FLOODING...WHEREAS BELOW NORMAL PRECIPITATION WOULD TEND TO DECREASE IT.

* THE RISK OF FLOODING AND FLASH FLOODING WILL BE HIGHER THAN NORMAL AFTER THE SNOW MELTS...AND WILL REMAIN HIGHER THAN NORMAL AT LEAST INTO LATE SPRING. HEAVY RAINFALL MAY RESULT IN ADDITIONAL OR PROLONGED FLOODING.

* WE WILL ISSUE OUR NEXT...UPDATED OUTLOOK ON THURSDAY...FEBRUARY 17

2011. YOU MAY ALSO REFER TO OUR WEB SITE FOR MORE INFORMATION AT...
 HTTP://WWW.WEATHER.GOV/DESMOINES .

TABLE 1 BELOW LISTS THE PROBABILITIES OF REACHING FLOOD STAGE /MINOR FLOODING/...AS WELL AS MODERATE AND MAJOR FLOOD LEVELS FOR EACH FORECAST POINT.

...TABLE 1...PROBABILITIES FOR MINOR...MODERATE AND MAJOR FLOODING...

VALID FOR FEBRUARY THROUGH APRIL 2011

LOCATION	-----FLOOD STAGES-----						DEP FROM NORMAL OF REACHING FLOOD STAGE
	MINOR STG	PCT	MODERATE STG	PCT	MAJOR STG	PCT	
IOWA RIVER							
ROWAN	11	83%	14	9%	16.5	1%	39% GREATER
MARSHALLTOWN	18	19%	19	11%	21	1%	11% GREATER
CEDAR RIVER							
WAVERLY	11.5	21%	15	4%	17	1%	17% GREATER
JANESVILLE	11	27%	13	11%	15	4%	17% GREATER
CEDAR FALLS	88	83%	90	47%	93	16%	37% GREATER
WATERLOO	12	63%	15	31%	19	13%	30% GREATER
W FK CEDAR RIVER							
FINCHFORD	12	39%	14	13%	16	4%	NEAR NORMAL
WINNEBAGO RIVER							
MASON CITY	7	77%	10	13%	14	1%	44% GREATER
SHELL ROCK RIVER							
SHELL ROCK	12	54%	13	24%	15	6%	18% GREATER
BEAVER CREEK							
NEW HARTFORD	10	21%	12	9%	14	---	6% GREATER
S SKUNK RIVER							
AMES 3N	14	---	15	---	16	---	N/A
AMES HWY 30	20	21%	23	3%	24	3%	NEAR NORMAL
COLFAX	17	8%	19	3%	21	---	NEAR NORMAL
OSKALOOSA	24.5	---	26	---	30	---	N/A
SQUAW CREEK							
AMES	9	3%	12	3%	15	---	NEAR NORMAL
W FK DES MOINES RIVER							
ESTHERVILLE	7	>98%	10	80%	14	9%	N/A

EMMETSBURG	10	82%	11	59%	13	4%	66% GREATER
HUMBOLDT	8	88%	9	75%	12	11%	49% GREATER
E FK DES MOINES RIVER							
ALGONA	14	>98%	17	54%	22	1%	N/A
DAKOTA CITY	20	6%	22	3%	24	1%	NEAR NORMAL
DES MOINES RIVER							
FORT DODGE	10.5	49%	13	11%	14	6%	30% GREATER
STRATFORD	14	88%	18	42%	22	9%	41% GREATER
DSM-2ND AVE	23	1%	25	1%	27	1%	NEAR NORMAL
DSM-SE 6TH	24	42%	26	9%	30	3%	20% GREATER
EDDYVILLE	61	67%	66	---	69	---	29% GREATER
OTTUMWA	11	67%	12	42%	15	3%	26% GREATER
BOONE RIVER							
WEBSTER CITY	12	3%	15	---	17	---	NEAR NORMAL
BEAVER CREEK							
GRIMES	12	11%	14	1%	16	---	NEAR NORMAL
N RACCOON RIVER							
JEFFERSON	19	3%	20	1%	21	1%	NEAR NORMAL
PERRY	15	52%	17	29%	20	6%	18% GREATER
S RACCOON RIVER							
REDFIELD	20	---	24	---	27	---	N/A
RACCOON RIVER							
VAN METER	16	9%	19	3%	21	---	NEAR NORMAL
DSM-HWY 28	32	59%	36	8%	39.5	---	25% GREATER
DSM-FLEUR DR	12	54%	14	19%	20	3%	23% GREATER
NORTH RIVER							
NORWALK	18	68%	23	1%	25	---	28% GREATER
MIDDLE RIVER							
INDIANOLA	19	31%	24	1%	25	1%	19% GREATER
SOUTH RIVER							
ACKWORTH	26	---	29	---	31	---	N/A
CEDAR CREEK							
BUSSEY	18	9%	26	---	28	---	NEAR NORMAL
E NISHNABOTNA RIVER							
ATLANTIC	17	9%	21.0	---	22.0	---	NEAR NORMAL
E FK 102 RIVER							
BEDFORD	21	5%	22.0	4%	23.0	---	NEAR NORMAL

THOMPSON RIVER

DAVIS CITY	9	45%	12.0	14%	19.0	---	10% GREATER
------------	---	-----	------	-----	------	-----	-------------

CHARITON RIVER

CHARITON	18	17%	21.0	---	23.0	---	NEAR NORMAL
MOULTON	35	8%	36.0	4%	37.0	---	NEAR NORMAL

S FK CHARITON RIVER

PROMISE CITY	18	52%	24.0	---	27.0	---	7% GREATER
--------------	----	-----	------	-----	------	-----	------------

KEY FOR THE ABOVE TABLE...

STG = STAGE (FEET)

PCT = PERCENT

DEP = DEPARTURE FROM NORMAL

THE BELOW TABLES SHOW THE PERCENTAGE CHANCES OF AREA RIVERS RISING ABOVE AND FALLING BELOW VARIOUS STAGES OVER THE NEXT 90 DAYS. THESE PROBABILITIES ARE CALLED EXCEEDANCE AND NON EXCEEDANCE PROBABILITIES RESPECTIVELY.

IN TABLE 1 BELOW...THE 90 THROUGH 10 PERCENT COLUMNS INDICATE EXCEEDANCE PROBABILITIES /THE CHANCES OF THE RIVER RISING ABOVE THE LISTED STAGE LEVELS/.

IN TABLE 2 BELOW...THE 90 THROUGH 10 PERCENT COLUMNS INDICATE NON EXCEEDANCE PROBABILITIES /THE CHANCES OF THE RIVER FALLING BELOW THE LISTED STAGE LEVELS/.

HERE ARE SOME EXAMPLES USING THE TABLES BELOW...

THE DES MOINES RIVER AT FORT DODGE HAS A FLOOD STAGE OF 10 FEET. IN THE NEXT 90 DAYS THERE IS A 10 PERCENT CHANCE OF THE STAGE REACHING 13.2 FEET.

ALSO... THE CEDAR RIVER AT CEDAR FALLS HAS A FLOOD STAGE OF 88 FEET. IN THE NEXT 90 DAYS THERE IS A 10 PERCENT CHANCE OF THE STAGE FALLING TO 77.0 FEET.

...TABLE 2...EXCEEDANCE PROBABILITIES...

VALID FOR FEBRUARY THROUGH APRIL 2011

LOCATION	FS (FT)	90%	80%	70%	60%	50%	40%	30%	20%	10%
----------	---------	-----	-----	-----	-----	-----	-----	-----	-----	-----

IOWA RIVER

ROWAN	11	10.5	11.0	11.4	11.9	12.0	12.4	12.7	13.2	14.0
MARSHALLTOWN	18	14.5	15.1	16.1	16.3	16.7	17.0	17.3	18.1	19.2

CEDAR RIVER

WAVERLY	11.5	7.7	8.4	8.7	8.9	9.4	9.9	10.8	11.8	12.9
JANESVILLE	11	6.7	7.7	8.2	8.5	9.1	10.0	10.9	12.5	14.0
CEDAR FALLS	88	87.2	88.2	88.9	89.4	89.8	90.4	91.3	92.7	94.2
WATERLOO	12	9.8	10.6	11.7	12.4	13.0	14.1	15.5	16.7	19.2

W FK CEDAR RIVER

FINCHFORD	12	10.1	10.6	11.0	11.2	11.5	12.0	12.5	13.0	14.4
-----------	----	------	------	------	------	------	------	------	------	------

WINNEBAGO RIVER

MASON CITY	7	6.7	6.9	7.3	7.7	8.1	8.5	8.6	9.2	11.1
------------	---	-----	-----	-----	-----	-----	-----	-----	-----	------

SHELL ROCK RIVER

SHELL ROCK	12	11.0	11.4	11.6	11.8	12.3	12.6	12.9	13.2	14.5
------------	----	------	------	------	------	------	------	------	------	------

BEAVER CREEK

NEW HARTFORD	10	6.2	6.5	7.1	7.7	8.2	8.6	9.5	10.2	12.3
--------------	----	-----	-----	-----	-----	-----	-----	-----	------	------

S SKUNK RIVER

AMES 3N	14	6.2	6.5	6.8	7.2	7.6	7.9	8.3	9.1	10.0
AMES HWY 30	20	14.8	15.6	16.3	17.0	17.8	18.2	19.2	20.2	21.4
COLFAX	17	10.6	11.6	12.3	13.1	13.9	14.3	15.3	16.0	16.8
OSKALOOSA	24.5	13.4	14.0	15.2	15.9	17.2	18.1	18.7	19.8	21.8

SQUAW CREEK

AMES	9	3.3	3.6	3.9	4.4	4.8	5.1	5.6	6.5	7.3
------	---	-----	-----	-----	-----	-----	-----	-----	-----	-----

W FK DES MOINES RIVER

ESTHERVILLE	7	9.8	10.0	10.8	11.3	11.6	12.1	12.5	13.0	14.1
EMMETSBURG	10	8.8	10.2	10.8	11.0	11.3	11.6	11.7	12.1	12.7
HUMBOLDT	8	8.0	8.8	9.3	9.7	9.9	10.2	10.5	11.2	12.6

E FK DES MOINES RIVER

ALGONA	14	15.5	15.8	16.3	16.8	17.1	17.5	17.9	18.4	19.2
DAKOTA CITY	20	14.2	14.8	15.2	15.8	16.3	16.8	17.3	17.8	19.0

DES MOINES RIVER

FORT DODGE	10.5	8.4	9.3	9.7	9.8	10.5	11.0	11.3	12.2	13.2
STRATFORD	14	13.8	15.6	16.0	16.8	17.5	18.3	19.6	20.7	22.4
DSM-2ND AVE	23	18.4	18.5	19.1	19.5	19.6	19.9	19.9	20.5	21.4
DSM-SE 6TH	24	19.3	21.0	22.1	23.3	23.7	24.2	24.4	24.6	26.4
EDDYVILLE	61	59.4	60.6	60.9	61.1	61.4	61.6	61.8	61.9	62.3
OTTUMWA	11	9.4	10.7	11.0	11.4	11.6	12.1	12.3	12.5	13.4

BOONE RIVER

WEBSTER CITY	12	6.1	6.6	7.4	7.9	8.2	8.5	9.1	9.6	10.5
--------------	----	-----	-----	-----	-----	-----	-----	-----	-----	------

BEAVER CREEK

GRIMES	12	5.8	7.5	8.5	9.3	9.7	10.3	10.9	11.7	12.4
--------	----	-----	-----	-----	-----	-----	------	------	------	------

N RACCOON RIVER

JEFFERSON	19	9.5	10.6	11.2	12.1	12.8	13.4	14.3	15.3	16.7
PERRY	15	11.8	12.9	13.9	14.6	15.2	15.9	17.1	18.4	19.6

S RACCOON RIVER

REDFIELD	20	5.1	5.7	6.6	7.6	8.4	8.9	9.3	9.9	11.8
----------	----	-----	-----	-----	-----	-----	-----	-----	-----	------

RACCOON RIVER

VAN METER	16	8.2	9.7	11.2	12.3	12.9	13.5	14.0	14.7	16.1
DSM-HWY 28	32	28.3	29.4	31.0	32.0	32.6	33.3	33.5	34.1	35.1
DSM-FLEUR DR	12	7.7	8.8	10.5	11.5	12.2	13.0	13.3	14.0	15.5

NORTH RIVER

NORWALK	18	13.6	16.4	18.1	19.8	21.1	21.4	21.8	22.0	22.1
---------	----	------	------	------	------	------	------	------	------	------

MIDDLE RIVER

INDIANOLA	19	12.2	14.6	15.7	16.0	16.8	18.5	19.1	20.1	23.3
-----------	----	------	------	------	------	------	------	------	------	------

SOUTH RIVER

ACKWORTH	26	10.7	11.6	12.1	12.6	13.0	13.5	13.9	14.6	16.7
----------	----	------	------	------	------	------	------	------	------	------

CEDAR CREEK

BUSSEY	18	10.3	11.1	12.3	13.2	14.2	15.2	15.9	16.8	19.0
--------	----	------	------	------	------	------	------	------	------	------

E NISHNABOTNA RIVER

ATLANTIC	17	8.2	10.0	10.6	11.5	12.5	13.7	14.3	15.0	16.8
----------	----	-----	------	------	------	------	------	------	------	------

E FK 102 RIVER

BEDFORD	21	14.5	15.1	16.0	16.3	17.1	17.5	18.1	18.9	19.5
---------	----	------	------	------	------	------	------	------	------	------

THOMPSON RIVER

DAVIS CITY	9	5.7	6.5	7.3	8.2	8.7	9.5	9.8	10.5	13.7
------------	---	-----	-----	-----	-----	-----	-----	-----	------	------

CHARITON RIVER

CHARITON	18	15.2	15.6	16.1	16.3	16.7	16.9	17.3	17.8	18.4
MOULTON	35	25.1	26.1	27.2	28.5	30.1	31.6	32.7	34.1	34.7

S FK CHARITON RIVER

PROMISE CITY	18	13.2	14.8	16.7	17.4	18.3	19.1	19.6	19.8	21.7
--------------	----	------	------	------	------	------	------	------	------	------

...TABLE 3...NON EXCEEDANCE PROBABILITIES...

VALID FOR FEBRUARY THROUGH APRIL 2011

LOCATION	FS (FT)	90%	80%	70%	60%	50%	40%	30%	20%	10%
----------	---------	-----	-----	-----	-----	-----	-----	-----	-----	-----

IOWA RIVER

ROWAN	11	3.9	3.9	3.9	3.9	3.9	3.9	3.8	3.8	3.7
MARSHALLTOWN	18	9.8	9.8	9.8	9.8	9.7	9.7	9.7	9.7	9.6
CEDAR RIVER										
WAVERLY	11.5	3.9	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8
JANESVILLE	11	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2
CEDAR FALLS	88	77.2	77.2	77.1	77.1	77.1	77.1	77.1	77.0	77.0
WATERLOO	12	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0
W FK CEDAR RIVER										
FINCHFORD	12	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.7
WINNEBAGO RIVER										
MASON CITY	7	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.2	3.2
SHELL ROCK RIVER										
SHELL ROCK	12	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.7
BEAVER CREEK										
NEW HARTFORD	10	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.6	2.6
S SKUNK RIVER										
AMES 3N	14	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2
AMES HWY 30	20	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.5
COLFAX	17	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.7	6.7
OSKALOOSA	20	8.0	8.0	8.0	8.0	8.0	7.9	7.9	7.8	7.8
SQUAW CREEK										
AMES	9	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5
W FK DES MOINES RIVER										
ESTHERVILLE	7	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.7
EMMETSBURG	10	1.8	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.5
HUMBOLDT	8	3.3	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.0
E FK DES MOINES RIVER										
ALGONA	14	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.0
DAKOTA CITY	20	8.2	8.2	8.2	8.2	8.1	8.1	8.1	8.1	8.0
DES MOINES RIVER										
FORT DODGE	10.5	3.8	3.7	3.7	3.7	3.7	3.7	3.7	3.6	3.6
STRATFORD	14	5.2	5.2	5.2	5.2	5.1	5.1	5.1	5.0	5.0
DSM-2ND AVE	23	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.2
DSM-SE 6TH	24	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.1	10.1
EDDYVILLE	61	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
OTTUMWA	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOONE RIVER										
WEBSTER CITY	12	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1

BEAVER CREEK										
GRIMES	12	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.2
N RACCOON RIVER										
JEFFERSON	19	5.0	5.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9
PERRY	15	4.1	4.1	4.1	4.1	4.1	4.1	4.0	4.0	3.9
S RACCOON RIVER										
REDFIELD	20	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.2
RACCOON RIVER										
VAN METER	16	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7
DSM-HWY 28	32	22.8	22.8	22.8	22.8	22.7	22.7	22.7	22.7	22.7
DSM-FLEUR DR	12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
NORTH RIVER										
NORWALK	18	5.9	5.9	5.9	5.9	5.8	5.8	5.8	5.8	5.7
MIDDLE RIVER										
INDIANOLA	19	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
SOUTH RIVER										
ACKWORTH	26	6.6	6.6	6.6	6.6	6.6	6.5	6.5	6.5	6.5
CEDAR CREEK										
BUSSEY	18	5.2	5.2	5.2	5.1	5.1	5.1	5.1	5.1	5.1

THESE NUMBERS ARE CALCULATED USING MULTIPLE SPRING SEASON SCENARIOS FROM 30 OR MORE YEARS OF CLIMATOLOGICAL DATA. THESE NUMBERS ALSO TAKE INTO ACCOUNT CURRENT CONDITIONS OF THE RIVER...SNOW COVER AND SOIL MOISTURE...AS WELL AS 30 TO 90 DAY OUTLOOKS OF TEMPERATURE AND PRECIPITATION. BY PROVIDING THE COMPLETE RANGE OF PROBABILISTIC NUMBERS...THE LEVEL OF RISK ASSOCIATED WITH LONG-RANGE PLANNING DECISIONS CAN BE DETERMINED.

...CURRENT CONDITIONS AS OF JANUARY 26 2011...

.SNOW PACK...THE SNOW PACK IS NEAR TO ABOVE NORMAL FOR THIS TIME OF YEAR. IT IS MOST ABOVE NORMAL IN THE NORTHEAST AND SOUTHWEST PORTIONS OF THE DES MOINES SERVICE AREA...AS WELL AS IN THE UPPER MOST DES MOINES RIVER BASIN IN SOUTHWEST MINNESOTA. SNOW WATER EQUIVALENTS RANGE FROM AROUND 1 INCH IN THE SOUTH...TO AROUND 4 INCHES IN THE FAR NORTHEAST AS WELL AS IN THE UPPER MOST DES MOINES RIVER BASIN IN SOUTHWEST MINNESOTA.

.STREAM LEVELS...VALUES ARE ABOVE TO MUCH ABOVE NORMAL AT MOST LOCATIONS. THE ONLY EXCEPTIONS ARE THE FAR SOUTH WHERE THEY ARE NEAR NORMAL. THE ABOVE NORMAL STREAM FLOWS HAVE PERSISTED SINCE THE SEASONALLY HEAVY RAINFALL LAST FALL.

.SOIL MOISTURE...FOR THE ENTIRE VERTICAL SOIL COLUMN...VALUES ARE ABOVE TO MUCH ABOVE NORMAL AT MOST LOCATIONS. IT IS MOST ABOVE NORMAL IN THE DES MOINES RIVER BASIN. SOIL MOISTURE HAS REMAINED ABOVE NORMAL SINCE LAST SUMMER. THE SEASONALLY HEAVY RAINFALL LAST FALL HELPED MAINTAIN RELATIVELY HIGH KEEP SOIL MOISTURE LEVELS.

.DROUGHT CONDITIONS...ALTHOUGH DROUGHT CONDITIONS WERE NOT INDICATED ACROSS THE DES MOINES SERVICE AREA...ABNORMALLY DRY CONDITIONS WERE NOTED JUST SOUTH AND SOUTHWEST OF IOWA...IN NEBRASKA...KANSAS AND MISSOURI. MODERATE DROUGHT CONDITIONS EXISTED IN EASTERN KANSAS. THESE DRY CONDITIONS HAVE CREPT NORTHEASTWARD OVER THE FALL AND WINTER.

.FROST DEPTH...FROST DEPTHS RANGED FROM AROUND 6 INCHES IN THE SOUTH...TO OVER 10 INCHES IN THE NORTH. FROST DEPTHS ARE CONSIDERABLY GREATER THAN THOSE OF ONE YEAR AGO.

.PRECIPITATION...OVER THE PAST 3 MONTHS...VALUES HAVE BEEN ABOVE NORMAL ACROSS THE NORTHERN ONE-THIRD BUT NEAR TO BELOW NORMAL ELSEWHERE. IN CONTRAST...OVER THE PAST 6 MONTHS...VALUES HAVE BEEN NEAR TO ABOVE NORMAL AT MOST LOCATIONS.

.TEMPERATURES...OVER THE PAST MONTH...VALUES HAVE BEEN BELOW TO MUCH BELOW NORMAL.

...ONE MONTH CLIMATE OUTLOOK /FOR FEBRUARY/...

.TEMPERATURES...BELOW NORMAL ACROSS THE NORTHEAST TWO-THIRDS OF THE DES MOINES SERVICE AREA...AND EQUAL CHANCES FOR ABOVE...BELOW...AND NEAR NORMAL ELSEWHERE.

.PRECIPITATION...EQUAL CHANCES FOR PRECIPITATION ACROSS THE ENTIRE DES MOINES SERVICE AREA.

NOTE...EQUAL CHANCES MEANS THAT THERE ARE NO STRONG INDICATORS OF ABOVE...BELOW OR NEAR NORMAL CONDITIONS.

...THREE MONTH CLIMATE OUTLOOK /FOR FEBRUARY THROUGH APRIL/...

.TEMPERATURES...BELOW NORMAL ACROSS THE NORTHERN HALF OF THE DES MOINES SERVICE AREA...AND EQUAL CHANCES FOR ABOVE...BELOW AND NEAR NORMAL ELSEWHERE.

.PRECIPITATION...BELOW NORMAL ACROSS THE WESTERN ONE-THIRD OF THE DES MOINES SERVICE AREA...AND EQUAL CHANCES FOR ABOVE...BELOW AND NEAR NORMAL ELSEWHERE.

\$\$

ZOGG

